

REMARKS

This Amendment and Response to Office Action is submitted in response to the outstanding Office Action mailed July 28, 2003. Claims 48-72 are pending in the above-referenced application. The Examiner rejected claims 60-66 and 70 under 35 U.S.C. §112, rejected claims 48-54, 60-62, 65, 66, and 67-72 under 35 U.S.C. §103(a). Claims 55-59 have been allowed, and the Examiner indicated that claim 64 defines allowable subject matter. By this paper, claims 50, 60, 61, 68, and 70-72 have been amended, and claims 73-76 have been added to further point out and distinctly claim the subject matter Applicants regard as their invention. In view of the following remarks, reconsideration and allowance of claims 48-72, and allowance of new claims 73-76, are respectfully requested.

OBJECTION TO CLAIM 50

The Examiner objected to claim 50 for an informality, *i.e.*, the misspelling of the word “first.” By this paper, claim 50 has been amended to include the correct spelling of the word “first.” Accordingly, Applicants respectfully request withdrawal of the objection to claim 50.

REJECTION OF CLAIMS 60-66 AND 70 UNDER 35 U.S.C. §112

The Examiner rejected claims 60-66 and 70 under 35 U.S.C. 112, second paragraph, for indefiniteness. More precisely, the Examiner indicated that the terms “first cushion port” and “second cushion port” lack antecedent basis. By this paper, claims 60, 61, 70, and 72 have been amended to recite “first sail port” and “second sail port” in place of “first cushion port” and “first sail port,” thereby obtaining proper antecedent basis. Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112.

REJECTION OF CLAIMS 48, 49, 50, 52, 60, 61, AND 65 UNDER 35 U.S.C. §103(a) OVER NEIDERT IN VIEW OF KESHAVARAJ

The Examiner rejected claims 48, 49, 50, 52, 60, 61, and 65 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,176,513 to Neidert (hereinafter, "Neidert") in view of U.S. Patent No. 6,299,204 to Keshavaraj (hereinafter "Keshavaraj"). Applicants have reviewed the Examiner's response to Applicants' previous arguments. Nevertheless, Applicants must respectfully maintain that claim 48 is nonobvious over the cited references. More precisely, the proposed combination of Neidert and Keshavaraj does not teach all the elements of the rejected claims, and even if all the elements were present, the Examiner has not provided sufficient motivation to combine Neidert with Keshavaraj. In support of these assertions, a more detailed discussion regarding the test for obviousness will be presented below, with supporting case law.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *MPEP* §2143.03. Applicants must respectfully assert that Neidert does not disclose all of the limitations of claim 48. More precisely, claim 48 recites "each of said first and second cushion portions are fabricated separately from the first sail portion." Separate fabrication is a claim limitation within the meaning of *MPEP* §2143.03, and is not found in Neidert. This language limits claim 48 to a safety restraint apparatus formed from modular components. Modular formation is one of the major benefits provided by Applicants' invention. See page 5, line 9 through page 6, line 9 of the application for a discussion of benefits to be obtained through modular construction of a side impact airbag.

Keshavaraj discloses a single inflatable restraint cushion 2 made from a first body panel section 10 and a second body panel section 12. Keshavaraj does not disclose multiple cushions that are fabricated separately from each other and subsequently attached together. Consequently, Keshavaraj does not supply the limitation missing from Neidert, *i.e.*, separate formation of the first cushion portion, the second cushion portion, and the sail portion. Neither reference teaches modular formation, which is not only a limitation of claim 48 but, as mentioned above, is the source of many of the benefits provided by Applicants' invention. Claim 60, as amended, recites "connecting the first sail portion to the first and second cushion portions to form an integral safety restraint

apparatus.” Accordingly, Applicants respectfully assert that a combination of Neidert with Keshavaraj would not disclose all the elements of claim 48 or claim 60, and thus, a *prima facie* case of obviousness has not been made with respect to claims 48 and 60.

Furthermore, Applicants respectfully assert that even if the combination of Neidert with Keshavaraj would yield the invention recited in the rejected claims, they could not be combined without providing an explicit, specific motivation to combine them. In the Response to Arguments, the Examiner cited to *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453. *Rouffet* provides some language regarding the importance of the requirement to find motivation to combine in order to make a *prima facie* case of obviousness under 35 U.S.C. §103(a):

As this court has stated, "virtually all [inventions] are combinations of old elements." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698; 218 USPQ 865, 870 (Fed. Cir. 1983); see also *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) ("Most, if not all, inventions are combinations and mostly of old elements."). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

Rouffet at 1357.

Motivation to combine must be clearly set forth. In *In re Sang Su Lee*, 277 F.3d 1338 (Fed. Cir. 2002), the Federal Circuit further provided that “[t]he factual inquiry whether to combine

references must be thorough and searching.” “It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with.” *Lee* at 1343.

Furthermore, motivation to combine must be specific. “The need for specificity pervades this authority.” *Lee* at 1343. “Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.” *Rouffet* at 1359.

The Examiner indicated that the language in Keshavaraj, found at column 4, line 61 through column 5, line 1, provides motivation to combine Neidert with Keshavaraj. This text reads as follows:

However, it has proven more cost effective to cut the body panel sections 10, 12 as two separate pieces and attaching them to each other through the use of a substantially straight seam. Additionally, it has proven to be more cost effective if the body panel sections 10, 12 (or the larger panel section in the alternative embodiments) are altered to fit the entire width of the fabric in order to provide the most efficient use of the fabric itself.

This text simply provides a preferred method of construction for the inflatable restraint cushion 2 of Keshavaraj. The inflatable restraint cushion 2 clearly appears to be designed for frontal impact protection. Applicants do not deny that it is known in the art to construct a frontal impact airbag from multiple pieces of fabric. However, the text cited by the Examiner does not disclose the use of such methods in connection with any other type of airbag, much less an inflatable curtain designed for side impact protection.

Applicants maintain that inflatable curtains are vastly different from frontal impact airbags in terms of their operational requirements. Frontal impact airbags must generally remain inflated for enough time to cushion a vehicle occupant at the time of impact, *i.e.*, only a number of milliseconds. Frontal impact airbags often include vents to expedite deflation of the airbag. By contrast, in order to provide rollover protection, an inflatable curtain must remain inflated for as long as several seconds, a period of time orders of magnitude larger than that required for frontal impact airbags.

Accordingly, Applicants assert that a person of skill in the art, working at the time Applicants filed their application, would have no reason to connect the text quoted from Keshavaraj with a side impact, inflatable curtain. Due to the differences between frontal and side impact airbags, Applicants respectfully suggest that, in order to find motivation to combine that is specific enough to satisfy the requirements of Federal Circuit law, the Examiner would have to find a reference that specifically discloses the desirability of using multiple gas-containing modules to form an inflatable curtain. The only place in the record that such a suggestion may be found is in Applicants' own disclosure (page 5, line 1, through page 6, line 9). Prior art references must not be combined through the benefit of hindsight to "use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention." *Rouffet* at 3157.

The Examiner cited *Nerwin v. Erlichman*, 168 USPQ 177, for the proposition that "constructing a formerly integral structure in various elements involves only routine skill in the art." Applicants respectfully assert that *Nerwin* does not stand for such a proposition. The closest text Applicants can find to such a proposition is as follows: "The mere fact that a given structure is integral does not preclude its consisting of various elements." *Nerwin* at 179. This text does not refer to an obviousness determination, or even a novelty determination. Rather, *Nerwin* is an interference case in which the question arises of whether one physical member can disclose two separate claim "elements." Thus, the "elements" discussed are not physical elements at all, but are claim elements. There is no discussion of reconstructing the integral structure to provide multiple pieces. It thus follows that *Nerwin* provides no holding or dicta regarding the obviousness of separating a formerly integral structure to provide multiple parts.

Accordingly, Applicants respectfully assert that claim 48 is nonobvious over the cited references. Claim 60 has been amended to overcome the rejection under 35 U.S.C. §112, to provide clearer language, and to recite that the safety restraint apparatus is "adapted to provide side impact protection for an occupant of the vehicle." Accordingly, claim 60 is also drawn to a side impact airbag, and is nonobvious for the same reasons as claim 48. Furthermore, claims 49, 50, and 52 depend from claim 1, and claims 61 and 65 depend from claim 60, and therefore are also nonobvious

for the same reasons. Applicants respectfully request withdrawal of the rejection of claims 48-50, 52, 60, 61, and 65 under 35 U.S.C. §103(a).

REJECTION OF CLAIMS 67-72 UNDER 35 U.S.C. §103(a) OVER NEIDERT IN VEIW OF KESHAVARAJ AND HAWTHORN

The Examiner rejected claims 67-72 under 35 U.S.C. §103(a) as being unpatentable over Neidert in view of Keshavaraj and further in view of U.S. Patent No. 5,423,273 to Hawthorn. Claims 67 and 70 depend from claims 48 and 60, respectively, and are thus nonobvious for the reasons set forth in the discussion of claim 48. Claims 68, 69, 71, and 72 also include limitations directed to modular construction. Since Hawthorn discloses only the construction of a single cushion, Hawthorn does not disclose modular construction, and therefore does not supply the limitations of the rejected claims that are missing from Neidert and Keshavaraj. Furthermore, for the reasons set forth previously, Applicants respectfully assert that Neidert and Keshavaraj cannot be combined in the absence of evidence of record that shows specific motivation to combine them, as required by recent Federal Circuit law. The addition of Hawthorn to the combination of Neidert and Keshavaraj does not remedy this defect. Accordingly, claims 67-72 are nonobvious.

Yet further, claims 67 and 70 both recite overlap of the first end of the first sail portion with the first sail port. The Examiner relies on the addition of Hawthorn to the combination of Neidert and Keshavaraj make the rejection. Thus, motivation to combine Hawthorn with Neidert and Keshavaraj must also be cited in order to provide a *prima facie* rejection of claims 67 and 70 under 35 U.S.C. §103(a).

Applicants respectfully assert that a showing that it is known to overlap connecting fabric pieces in the context of a frontal impact airbag, as disclosed by Hawthorn, does not provide the level of specificity required to constitute motivation to combine. As set forth previously, the design of side impact airbags is quite different from that of frontal impact airbags. Hence, a clear and specific disclosure of fabric overlap for attachment of modular side airbag components would be required to provide sufficient motivation to combine Neidert, Keshavaraj, and Hawthorn. Applicants respectfully request withdrawal of the rejection of claims 67-72 under 35 U.S.C. §103(a).

REJECTION OF CLAIMS 51, 53, 54, 62, AND 66 UNDER 35 U.S.C. §103(a) OVER NEIDERT
IN VEIW OF KESHAVARAJ AND VEIGA

The Examiner rejected claims 67-72 under 35 U.S.C. §103(a) as being unpatentable over Neidert in view of Keshavaraj and further in view of U.S. Patent No. 6,239,046 to Veiga. Claims 51, 53, and 54 depend from claim 48 and claims 62 and 66 depend from claim 60, and thus are nonobvious for the reasons set forth previously, in the discussion of claim 48. Since Veiga discloses only the construction of a single cushion, Veiga does not disclose modular construction, and therefore does not supply the limitations of the rejected claims that are missing from Neidert and Keshavaraj. For the reasons set forth previously, Applicants respectfully assert that Neidert and Keshavaraj cannot be combined in the absence of evidence of record that shows specific motivation to combine them, as required by recent Federal Circuit law. The addition of Veiga to the combination of Neidert and Keshavaraj does not remedy this defect. Accordingly, claims 51, 53, 54, 62, and 66 are nonobvious.

Additionally, claims 51, 53, 54, 62, and 66 recite attachment of components of a side impact airbag via coating and/or RF welding. The Examiner relies on the addition of Veiga to supply the coating and RF welding elements of claims 51, 53, 54, 62, and 66. Accordingly, motivation to combine Veiga with Neidert and Keshavaraj must also be cited in order to provide a *prima facie* rejection of claims 67 and 70 under 35 U.S.C. §103(a).

Veiga discloses the use of polyurethane and RF welding to provide a layered airbag fabric. RF welding is used to attach the layers together. The use of polymer coating and RF welding to form a single inflatable structure is not the same as the use of polymer coating and RF welding to attach multiple gas retaining cushions or connectors together. As discussed previously, modular construction is recited by claims 48 and 60, and is one of the benefits of Applicants' invention. Even if Veiga could supply the claim limitations not disclosed by Neidert and Keshavaraj, it would be necessary to find a clear and specific disclosure of RF welding and/or polymer coating for the purpose of attaching modular airbag components together to provide sufficient motivation to combine Neidert, Keshavaraj, and Veiga. Applicants respectfully request withdrawal of the rejection of claims 51, 53, 54, 62, and 66 under 35 U.S.C. §103(a).

Appl. No. 09/779,093

Amdt. dated October 2, 2003

• Reply to Office Action of July 28, 2003

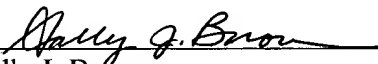
OBJECTION TO CLAIM 66

The Examiner objected to claim 64 as being dependent on a rejected base claim. For the reasons set forth above, claim 60, as amended, is allowable. Accordingly, Applicants respectfully request withdrawal of the objection to claim 64. By this paper, claims 73-76 have been added. Claims 73 and 75 each recite that "the first sail portion is fabricated substantially of a material different from that used to substantially fabricate the first and second cushion portions." Claim 74 depends from claim 73 and claim 76 depends from claim 75. Applicants thus respectfully assert that claims 73-76 are allowable for the same reasons as claim 64.

CONCLUSION

In view of the foregoing remarks, Applicants submit that claims 48-76 are in a condition for allowance. If there are any remaining issues preventing allowance of the pending claims, the Examiner is requested to contact the undersigned.

Respectfully submitted,


Sally J. Brown
Reg. No. 37,788
Attorney for Applicant

Date: 10/2/03

Autoliv ASP, Inc.
3350 Airport Road
Ogden, Utah 84405
Telephone: (801) 625-4800

S:\ALLCLIENTS\2949 Autoliv\2949.2.4\oar3\2949.2.4.oar3.doc